

"Express Mail" Mailing Label No. EL 059791658USDate of Deposit 9/9/99 Declaration and Power of Attorney For Patent Application

I hereby certify that this paper or fees is being deposited with the United States Postal Service "Express Mail" Post Office to Addressee service under 37 CFR 1.10 on the date indicated above and is addressed to: Assistant Commissioner for Patents, Washington, D.C.

By Janet Hoban

下記の氏名の発明者として、私は以下の通り宣言します。

私の住所、私書箱、国籍は、下記の私の氏名の後に記載された通りです。

下記の名称の発明に関して請求範囲に記載され、特許出願している発明内容について、私が最初かつ唯一の発明者（下記の氏名が一つの場合）もしくは最初かつ共同発明者であると（下記の名称が複数の場合）信じています。

特許出願宣言書及び委任状

## Japanese Language Declaration

日本語宣言書

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

PHOTOCATALYST FORMULATION, PHOTOCATALYST-CONTAINING MATERIAL, AND PHOTOCATALYTICALLY ACTIVATABLE MATERIAL AND PROCESS FOR PRODUCING THE SAME

the specification of which is attached hereto unless the following box is checked:

was filed on August 21, 1998  
as United States Application Number or  
PCT International Application Number  
PCT/JP98/03705 and was amended on  
       (if applicable).

上記発明の明細書（下記の欄でX印がついていない場合は、本書に添付）は、

に提出され、米国出願番号または  
特許協定条約 国際出願番号を        とし、  
(該当する場合)        に訂正されました。

私は、特許請求範囲を含む上記訂正後の明細書を検討し、内容を理解していることをここに表明します。

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

私は、連邦規則法典第37編第1条56項に定義されるとおり、特許資格の有無について重要な情報を開示する義務があることを認めます。

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

## Japanese Language Declaration (日本語宣言書)

私は、米国法典第35編119条(a)~(d)項又は365条(b)項に基づき下記の、米国以外の国の中なくとも1ヶ国を指定している特許協力条約365条(a)項に基づく国際出願、又は外国での特許出願もしくは発明者証の出願についての外国優先権をここに主張するとともに、優先権を主張している、本出願の前に出願された特許または発明者証の外国出願を以下に、枠内をマークすることで、示しています。

I hereby claim foreign priority under Title 35, United States Code, Section 119 (a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

## Prior Foreign Application(s)

外国での先行出願

362078/1997	Japan	10/December/1997	<input type="checkbox"/>
(Number) (番号)	(Country) (国名)	(Day/Month/Year Filed) (出願年月日)	
(Number) (番号)	(Country) (国名)	(Day/Month/Year Filed) (出願年月日)	<input type="checkbox"/>

私は、第35編米国法典119条(e)項に基いて下記の米国特許出願規定に記載された権利をここに主張いたします。

I hereby claim the benefit under Title 35, United States Code, Section 119 (e) of any United States provisional application(s) listed below.

(Application No.) (出願番号)	(Filing Date) (出願日)	(Application No.) (出願番号)	(Filing Date) (出願日)
-----------------------------	------------------------	-----------------------------	------------------------

私は下記の米国法典第35編120条に基いて下記の米国特許出願に記載された権利、又は米国を指定している特許協力条約365条(c)に基づく権利をここに主張します。また、本出願の各請求範囲の内容が米国法典第35編112条第1項又は特許協力条約で規定された方法で先行する米国特許出願に開示されていない限り、その先行米国出願書提出日以降で本出願書の日本国内または特許協力条約国提出日までの期間中に入手された、連邦規則法典第37編1条56項で定義された特許資格の有無に関する重要な情報について開示義務があることを認識しています。

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or 365 (c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of application:

(Application No.) (出願番号)	(Filing Date) (出願日)	(Status: Patented, Pending, Abandoned) (現況:特許可済、係属中、放棄済)
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(Application No.) (出願番号)	(Filing Date) (出願日)	(Status: Patented, Pending, Abandoned) (現況:特許可済、係属中、放棄済)
-----------------------------	------------------------	---

私は、私自身の知識に基づいて本宣言書中で私が行なう表明が真実であり、かつ私が入手した情報と私の信じるところに基づく表明が全て真実であると信じていること、さらに故意になされた虚偽の表明及びそれと同等の行為は米国法典第18編第1001条に基づき、罰金または拘禁、もしくはその両方により処罰されること、そしてそのような故意による虚偽の声明を行なえば、出願した、又は既に許可された特許の有効性が失われることを認識し、よってここに上記のことく宣誓を致します。

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**Japan's Language Declaration**  
(日本語宣言書)

委任状： 私は、下記の発明者として、本出願に関する一切の手続きを米特許商標局に対して遂行する弁理士または代理人として、下記の者を指名いたします。（弁理士、または代理人の氏名及び登録番号を明記のこと）

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)

Calvin P. Griffith (Reg. 34,831)

書類送付先：		Send Correspondence to:	
		Jones, Day, Reavis & Pogue North Point, 901 Lakeside Avenue Cleveland Ohio 44114 U.S.A.	
直接電話連絡先： (名前及び電話番号)		Direct Telephone Calls to: (name and telephone number) (216) 586 7050	
唯一または第一発明者名		Full name of sole or first inventor Kazuya TSUJIMICHI	
発明者の署名	日付	Inventor's signature Kazuya TSUJIMICHI	Date August 23, 1999
住所 日本国		Residence Kitakyushu-Shi	Japan
国籍 日本		Citizenship Japan	
私書箱 日本国福岡県北九州市小倉北区中島二丁目1番1号 東陶機器株式会社内		Post Office Address c/o Toto Ltd., 1-1, Nakashima 2-Chome, Kokura-Kita-Ku, Kitakyushu-Shi, Fukuoka-Ken, Japan	
第二共同発明者		Full name of second joint inventor, if any Hirotu HASUO	
第二共同発明者の署名	日付	Second inventor's signature Hirotu HASUO	Date August 23, 1999
住所 日本国		Residence Kitakyushu-Shi	Japan
国籍 日本		Citizenship Japan	
私書箱 日本国福岡県北九州市小倉北区中島二丁目1番1号 東陶機器株式会社内		Post Office Address c/o Toto Ltd., 1-1, Nakashima 2-Chome, Kokura-Kita-Ku, Kitakyushu-Shi, Fukuoka-Ken, Japan	
(第三以降の共同発明者についても同様に記載し、署名をすること) (Supply similar information and signature for third and subsequent joint inventors.)			

## Japan's Language Declaration

## (日本語宣言書)

Japan's Language Declaration (日本語宣言書)			
第三共同発明者	Full name of third joint inventor, if any Hideki KOBAYASHI		
第三共同発明者の署名	日付	Third inventor's signature	Date
		Hideki KOBAYASHI August 23, 1999	
住所	Residence		
日本国, _____	Kitakyushu-Shi, Japan		
国籍	Citizenship		
日本	Japan		
私書箱	Post Office Address		
日本国福岡県北九州市小倉北区中島二丁目1番1号 東陶機器株式会社内			
c/o Toto Ltd., 1-1, Nakashima 2-Chome, Kokura-Kita-Ku, Kitakyushu-Shi, Fukuoka-Ken, Japan			
第四共同発明者	Full name of fourth joint inventor, if any		
第四共同発明者の署名	日付	Fourth inventor's signature	Date
住所	Residence		
日本国, _____	Japan		
国籍	Citizenship		
日本	Japan		
私書箱	Post Office Address		
第五共同発明者	Full name of fifth joint inventor, if any		
第五共同発明者の署名	日付	Fifth inventor's signature	Date
住所	Residence		
日本国, _____	Japan		
国籍	Citizenship		
日本	Japan		
私書箱	Post Office Address		
第六共同発明者	Full name of sixth joint inventor, if any		
第六共同発明者の署名	日付	Sixth inventor's signature	Date
住所	Residence		
日本国, _____	Japan		
国籍	Citizenship		
日本	Japan		
私書箱	Post Office Address		
(第七以降の共同発明者についても同様に記載し、署名をすること) (Supply similar information and signature for seventh and subsequent joint inventors.)			

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Tzujimichi, et al.  
Title : Photocatalytic Hydrophilifiable Material  
Application No. : Application filed Herewith  
Attorney Docket : 628365009035

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**37 CFR 3.73(b) STATEMENT**

The application filed herewith is a division of Patent Application No. 09/772,048, which is a division of Patent Application No. 09/380,946.

Attached is a copy of the Assignment of the 09/380,946 parent application, along with the Notice of Recordation, showing the chain of title from the inventors to the assignee. The undersigned is authorized to act on behalf of the assignee.

Respectfully submitted,

*mitchell Rose*

---

Mitchell Rose, Patent Agent  
Reg. No. 47,906  
JONES DAY  
901 Lakeside Avenue  
Cleveland, Ohio 44114  
(216) 586-7094

Date: 7/23/03



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

JANUARY 27, 2000

PTAS

JONES, DAY, REAVIS & POGUE  
PAMELA J. EBLIN  
NORTH POINT  
901 LAKESIDE AVENUE  
CLEVELAND, OH 44114



\*101184176A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 09/09/1999

REEL/FRAME: 010335/0661  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNEE'S INTEREST (SEE DOCUMENT FOR DETAILS).

**ASSIGNOR:**

TSUJIMICHI, KAZUYA

DOC DATE: 08/23/1999

**ASSIGNOR:**

SIGNOR:  
HASUO, HIROTO

DOC DATE: 08/23/1999

ASSIGNOR:

KOBAYASHI, HIDEKI

DOC. DATE: 08/23/1999

ASSIGNEE:

SIGNEE:  
TOTO LIMITED  
1-1, NAKASHIMA 2-CHOME KOKURA-KITA-  
KU  
KITAKYUSHU-SHI, FUKUOKA-KEN, JAPAN

SERIAL NUMBER: 09380946  
PATENT NUMBER:

SHARON LATIMER, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

AIDS81-4U

Encl. 09/380946

FORM PTO-1595  
(Rev. 1-93)  
GPO No. 0651-0011 (exp. 4/94)

Tab settings □ □ □ □ □

To the Honorable Commissioner

10-29-1999



101184176

CASH FEE REC'D/PCT/PTO

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

09 SEP 1999

I the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Kazuya Tsujimichi, Hiroto Hasuo and  
Hideki KobayashiAdditional name(s) of conveying party(ies) attached?  Yes  No

## 3. Nature of conveyance:

 Assignment Merger Security Agreement Change of Name Other \_\_\_\_\_

Execution Date: 8/23/99

## 2. Name and address of receiving party(ies)

Name: Toto Limited

Internal Address: 1-1, Nakashima 2-Chome  
Kokura-ku

Street Address: Kitakyushu-shi

City: Fukuoka-ken State: JAPAN ZIP: \_\_\_\_\_

Additional name(s) & address(es) attached?  Yes  No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: 09/09/99

## A. Patent Application No.(s)

09/380946

## B. Patent No.(s)

Additional numbers attached?  Yes  No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

09/17/1999 MOLAYED 09000029 09380946  
Name: Pamela J. EblenInternal Address: Jones, Day, Reavis & Pogue  
10.00

Street Address: North Point

901 Lakeside Avenue

City: Cleveland State: OH ZIP: 44114

## 6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$ 40.00

 Enclosed Authorized to be charged to deposit account

## 8. Deposit account number:

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Pamela J. Eblen

Name of Person Signing

Signature

9/9/99

Date

Total number of pages including cover sheet, attachments, and document: 3

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents &amp; Trademarks, Box Assignments

Washington, D.C. 20231

## 譲渡証 (Translation/日本語訳)

下記に署名した私／私達、

\_\_\_\_\_ は、

ある発明を創出し、これについて合衆国特許出願は

- ここに私／私達により署名され、
- \_\_\_\_\_に私／私達により（それぞれ）署名され、
- \_\_\_\_\_に出願され、出願番号\_\_\_\_\_が交付され、
- PCT国際出願 \_\_\_\_\_として\_\_\_\_\_に出願され、

その発明は

という名称である。そして、ここにその受領を認める対価で：私／私達は、当該発明／出願について、合衆国とその属領及び全ての外国に於ける全面的かつ独占的な権利；合衆国とその属領及び全ての外国に於いて発行される特許証に関わる全ての権利、所有権、利益；一部継続出願、継続出願、分割出願、差替え出願、再発行出願、特許期間延長等、合衆国とその属領及び全ての外国に於いて既に提出されたか若しくは今後提出される特許に関わる全ての権利；そして、国際条約、同盟、契約、法令、協定（将来制定されるものを含む）に基づく全ての優先権を伴う一切の権利；を、日本国福岡県北九州市小倉北区中島二丁目1番1号に住所を有する東陶機器株式会社、その後継者、譲受人及び法定代理人に対して、売却、譲渡、移転するものとする。

さらに、私／私達は、東陶機器株式会社（以下譲受人と言う）が単数ないしは複数の当該発明（以下当該発明という）に関わる特許権を、自己の名により、合衆国とその属領及び全ての外国に於いて出願し、特許を受けること；またこの譲渡証の意図と目的を誠実に実行することを求められた場合、下記に署名した私／私達が、当該譲受人、その後継者、その被譲渡者、及び法定代理人の費用負担にて、一部継続出願、継続出願、分割出願、差替え出願、再発行出願、特許期間延長等を行い、合法的宣誓書、譲渡証、委任状等の書類を作成し、あらゆる法的または準法的訴訟手続に於いて証言を行うこと；当該発明とその経緯に関連して、下記に署名した私／私達が知り得た全ての事実を、当該譲受人、後継者、被譲渡者、及び法定代理人に連絡すること；そして当該譲受人、後継者、被譲渡者、及び法定代理人が、当該発明の特許権の適切な保護、維持、権利行使するために望ましいと考慮すること、また、当該発明に於ける特許出願に際し、当該譲受人、後継者、被譲渡者、及び法定代理人に対して法的権限を付与することが望ましいと考慮することについて、可能な限り行うことを承諾する。

## Assignment

For good and valuable consideration, the receipt of which is hereby acknowledged, I/WE, the undersigned,

Kazuya TSUJIMICHI, Hiroto HASUO and Hideki KOBAYASHI

who have created a certain invention for which an application for United States Letters Patent

- executed by ME/US on even date herewith,
- executed by ME/US on \_\_\_\_\_, (respectively),
- filed on \_\_\_\_\_ and assigned Serial No. \_\_\_\_\_,
- filed as International Application No. PCT/JP98/03705 filed on August 21, 1998,

and entitled:

PHOTOCATALYST FORMULATION, PHOTOCATALYST-CONTAINING MATERIAL, AND PHOTOCATALYTICALLY ACTIVATABLE MATERIAL AND PROCESS FOR PRODUCING THE SAME

Do hereby sell, assign and transfer to TOTO LTD., a corporation of Japan, having a place of business at 1-1, Nakashima 2-Chome, Kokura-Kita-Ku, Kitakyushu-Shi, Fukuoka-Ken, Japan, its successors, assigns, and legal representatives, the full and exclusive right to said invention and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties;

Agree that TOTO LTD., hereinafter referred to as Assignee, may apply for and receive Letters Patent for said invention and said inventions, hereinafter referred to as said invention, in its own name, in the United States, its territorial possessions, and all foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said Assignee, its successors, assigns and legal representatives, the undersigned will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to said Assignee, its successors, assigns or legal representatives all facts known to the undersigned relating to said invention and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or legal representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said invention and for vesting title to said invention and all applications for patents on said invention in said Assignee, its successors, assigns, or legal representatives; and

そして、私／私達は、この書面により譲渡された権利や財産に影響する、如何なる譲渡、授権、抵当権、ライセンス等その他の協定も他の第三者との間で行っていないこと；下記に署名した私／私達によって、この書面に記載されている権利が所有されていることを、当該譲受人、後継者、被譲渡者、及び法定代理人に対して誓約するものである。

さらに、下記に署名した私／私達はこの譲渡書は英語の部分の表現によってのみ解釈されることに同意する。

上記を証明するため、私／私達は下記日付で署名する。

Covenant with said Assignee, its successors, assigns, or legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

I/WE, the undersigned do further agree that this Assignment is to be construed solely according to the terms of the English language portions thereof.

IN TESTIMONY WHEREOF I/WE have hereunto set MY/OUR signature seal on the date indicated below.

唯一または第一発明者名	Full name of sole or first inventor Kazuya TSUJIMICHI		
発明者の署名	日付	Inventor's signature	Date
Kazuya TSUJIMICHI August 23, 1999			
第二共同発明者（いる場合）	Full name of second joint inventor, if any Hirotu HASUO		
第二共同発明者の署名	日付	Second Inventor's signature	Date
Hirotu HASUO August 23, 1999			
第三共同発明者（いる場合）	Full name of third joint inventor, if any Hideki KOBAYASHI		
第三共同発明者の署名	日付	Third Inventor's signature	Date
Hideki KOBAYASHI August 23, 1999			
第四共同発明者（いる場合）	Full name of fourth joint inventor, if any		
第四共同発明者の署名	日付	Fourth Inventor's signature	Date
第五共同発明者（いる場合）	Full name of fifth joint inventor, if any		
第五共同発明者の署名	日付	Fifth Inventor's signature	Date
第六共同発明者（いる場合）	Full name of sixth joint inventor, if any		
第六共同発明者の署名	日付	Sixth Inventor's signature	Date
第七共同発明者（いる場合）	Full name of seventh joint inventor, if any		
第七共同発明者の署名	日付	Seventh Inventor's signature	Date
第八共同発明者（いる場合）	Full name of eighth joint inventor, if any		
第八共同発明者の署名	日付	Eighth Inventor's signature	Date